

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

**WSOU INVESTMENTS, LLC D/B/A  
BRAZOS LICENSING AND  
DEVELOPMENT,**

*Plaintiff,*

**V.**

**ZTE CORPORATION, ZTE (USA) INC.; AND ZTE (TX), INC.,**

*Defendants.*



**CIVIL ACTION 6:20-cv-00489-ADA**

**CIVIL ACTION 6:20-cv-00492-ADA**

**CIVIL ACTION 6:20-cv-00495-ADA**

**PLAINTIFF'S SUPPLEMENTAL RESPONSIVE CLAIM CONSTRUCTION BRIEF**

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**Exhibits**

<b>Exhibit</b>	<b>Description</b>
<b>A</b>	ZTE's Invalidity Contentions (served Jan. 6, 2021) (previously filed)
<b>B</b>	Email from Joshua J. Yi, Ph.D. to Counsel of 04/14/21.
<b>C</b>	<i>ZTE Corp. et. al v. WSOU Investments, LLC</i> , IPR2021-00695, Paper 1, Petition for Inter Partes Review (filed Mar. 26, 2021).

**Abbreviations<sup>1</sup>**

<b>Abbreviation</b>	<b>Description</b>
'071 Patent	U.S. Patent No. 8,147,071
'232 Patent	U.S. Patent No. 9,258,232
'240 Prosecution History	U.S. Application Serial No. 10/820,111 (filed in -489 Case, Dkt. 67-10)
'240 Patent	U.S. Patent No. 7,487,240
IPR	<i>Inter Partes</i> Review
OGP 3.3	Order Governing Proceedings – Patent Case Ver 3.3
POSITA	Person of ordinary skill in the art
PTAB	Patent Trial and Appeal Board
Supp. Br.	Defendants' Supplemental Claim Construction Brief
WSOU	Plaintiff WSOU Investments LLC D/B/A Brazos Licensing and Development
ZTE	Defendants ZTE Corporation, ZTE (USA) Inc. and ZTE (TX), Inc.

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<sup>1</sup> Emphasis is added unless otherwise noted.

**I. U.S. Patent No. 7,487,240 (Case No. 6:20-cv-00489)**

**A. “the connectivity verification result(s) associated with the alarm” (claims 1, 6, and 13)<sup>2</sup>**

<b>WSOU’s Proposed Construction</b>	<b>Defendant’s Proposed Construction</b>
Plain and ordinary meaning	Indefinite under 35 U.S.C. § 112(b)

ZTE makes the following errors.

**First**, as a threshold matter, ZTE misstates the indefiniteness legal standard. Without citing any authority, ZTE articulates the Federal Circuit’s pre-*Nautilus* indefiniteness standard by stating that term is “insolubly ambiguous and has no ascertainable meaning.” Supp. Br. at 1. As the Court is well-aware, the Supreme Court overruled the “insolubly ambiguous” standard 7 years ago. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014) (“We conclude that the Federal Circuit’s [insolubly ambiguous] formulation, which tolerates some ambiguous claims but not others, does not satisfy the statute’s definiteness requirement.”). ZTE pays lip service to *Nautilus* (e.g., Suppl. Br. at 3), but its inconsistent and confusing invocation of both standards makes it impossible to determine which of two standards ZTE applies.

**Second**, ZTE argues that the term is indefinite because the claims lack any express “definition of what being ‘associated’ means.” Supp. Br. at 1. But when the meaning of a word in a claim is apparent, construing the word “involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips v. AWH Corp.* 415 F.3d 1303, 1314 (Fed. Cir. 2005) (“[T]he ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of *commonly understood* words.”). Thus, there is no need for the claims to define “associated” because a POSITA would understand that the commonly understood meaning applies.

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<sup>2</sup> In the headings, ZTE labels each of the terms “Disputed Term 5.” This appears to be an inadvertent error. To the extent ZTE attempts to count them as one term under the OGP, WSOU would oppose.

*Third*, ZTE wrongly asserts that the “claims fail to provide any meaning to what ‘connectivity verification result(s) *associated with the alarm*’ means.” *Id.* ZTE is wrong and ignores the surrounding claim language:

1. A network management connectivity verification framework comprising:
  - a connectivity verification server to perform unattended connectivity verification jobs; and
  - a connectivity verification application to:
    - define connectivity verification jobs capable of verifying connectivity in the network relating to at least Layer-2 and Layer-3 objects within a given containment hierarchy for the network,
    - control the connectivity verification server to perform the defined connectivity verification jobs, wherein the performing generates at least one of connectivity verification results,
    - display the connectivity verification results,
    - receive a user-input specification of a connectivity verification threshold,
    - compare the connectivity verification results to the specified connectivity verification threshold,
    - generate an alarm when the comparison shows that at least one of the connectivity verification results has reached the specified connectivity verification threshold,
    - identify Layer-2 and Layer-3 objects within the containment hierarchy affected by the connectivity verification results associated with the alarm, and display the identified Layer-2 and Layer-3 objects.

’240 patent at 16:34-60 (highlighting and emphasis added).

In its Supplemental Brief, ZTE only addresses the yellow highlighted claim language in isolation. Supp. Br. at 2. But the surrounding claim language (including the blue highlighted portions above) makes the scope clear to a POSITA with reasonable certainty. Claim 1 recites, *inter alia*, a “connectivity verification application to ... control the connectivity verification server to perform the defined connectivity verification jobs.” The performing “generates at least one of connectivity verification results.” These “connectivity verification results” are “compar[ed]” with the “specified connectivity verification threshold.” An “alarm” is “generate[d] ... when the comparison shows that at least one of the connectivity verification results has reached the specified connectivity verification threshold.” Thus, the phrase “associated with the alarm” is linked to these

other elements. A POSITA would understand with reasonable certainty the scope of this term based on the claim language itself.

**Fourth**, ZTE wrongly argues that the term is indefinite because the exact term is not “used in the specification.” Supp. Br. at 2. But the specification need not recite the term verbatim to avoid indefiniteness. *See PPS Data, LLC v. Jack Henry & Associates, Inc.*, 2:18-CV-00007-JRG, 2019 WL 1040742, at \*10 (E.D. Tex. Mar. 4, 2019) (“Defendant emphasizes that the specification does not explicitly refer to a “central system,” but explicit use of the term at issue is not necessarily required.”); *Capital Sec. Sys., Inc. v. NCR Corp.*, 725 F. App’x 952, 956–57 (Fed. Cir. Mar. 7, 2018) (agreeing that “although the term ... does not appear verbatim in the specification, the term is not indefinite when considered in the context of the claims and the specification”). Instead, the term must be “read *in light of* the specification delineating the patent, and the prosecution history,” and only found indefinite if the claims “fail to inform, with reasonable certainty” a POSITA. *Nautilus*, 572 U.S. at 901. Here, the specification describes the claimed feature in the context of a preferred embodiment:

Connectivity verification results are provided 622 to the connectivity verification server 510 which may compare 624 the connectivity verification results against thresholds 520 specified in respect of connectivity verification jobs assessing adherence to corresponding SLA agreements. When thresholds 520 are reached, alarms are raised 630 with an alarm 25 server 530. The results and the alarm information may also be propagated 632 to the connectivity verification application 502. The alarm information provided 632 to the connectivity verification application 502 may be subsequently updated 634 by the alarm server 530.

’240 patent at 9:20-30. A POSITA reading the claims in light of the specification (including the quoted portion above and other portions) would be informed of the claim scope with reasonable certainty. *See Nautilus*, 572 U.S. at 901.

**Fifth**, ZTE attempts to fault the prosecution history because, according to ZTE, it does not “clarify what it means for the ‘connectivity verification result(s)’ to be ‘associated with the alarm.’” Supp. Resp. at 3. But there was no need to “clarify” the meaning because a POSITA



would have understood, with reasonable certainty, the scope of the claim based on the claim language itself and specification as noted above.

**II. U.S. Patent No. 9,258,232 (Case No. 6:20-cv-00495)**

**A. “a movement sensor configured to detect movement of the apparatus and/or a projector” (claims 1)**

<b>WSOU’s Proposed Construction</b>	<b>Defendant’s Proposed Construction</b>
Plain and ordinary meaning	Indefinite under 35 U.S.C. § 112(b)

ZTE argues that this term is indefinite because the phrase “and/or” is purportedly “ambiguous.” Supp. Br. at 3-4.

**First**, a POSITA would understand the meaning of “and/or” (a commonly understood word) with reasonable certainty. Indeed, ZTE concedes that “and/or” can be “interpreted to mean both of the terms [apparatus and projector] equally.” *Id.* Thus, a POSITA would understand the phrase “and/or” to encompass both the conjunctive sense (“both”) and disjunctive sense (“or”).

**Second**, a POSITA would further understand the scope in light of the specification. The specification describes an embodiment where an apparatus 100 comprising, *inter alia*, a processor 1, projector 2, and movement sensor 3. ’071 patent at 4:34-36. The specification further describes that embodiment:

As the movement sensor 3 is mounted to the apparatus 100, the movement sensor 3 is capable of detecting movement of the apparatus 100 (and projector 2). The movement sensor 3 is therefore capable of detecting the same movement criterion mentioned above for the apparatus 100. The movement signalling that the movement sensor 3 is configured to provide to the processor 1 is therefore representative of and associated with the movement of the apparatus 100 (and projector 2). The movement sensor 3 provides said movement signalling to the processor 1 via output 3b, along surface connection 5b.

*Id.* at 6:34-43.

Thus, because at least in the above embodiment the movement sensor is mounted to the apparatus and the projector is part of the apparatus, a POSITA would understand that movement can be detected of both the apparatus and projector. The specification also recognized that the

invention covers instances where the apparatus itself is a projector and where the projector is part of an apparatus (such as a mobile phone).

The skilled person will appreciate that the apparatus of any one or more of these embodiments could be implemented in a portable electronic device such as a mobile phone, hand portable projector, PDA, netbook type personal computer, a laptop etc. The skilled person will therefore appreciate that the ***apparatus may in fact be a projector, or the projector aspect may be a sub-aspect of the totality of the apparatus***. The skilled person will also appreciate that the processor can be implemented in already existing apparatus that have both a projector and a movement sensor in order to provide the functionality of the above described embodiments.

*Id.* at 9:45-55. Accordingly, a POSITA would understand that the “and/or” language also covers a projector ***or*** an apparatus. Thus, the phrase “and/or” covers situations when the movement sensor is configured to detect movement from (a) both the apparatus and projector and (b) either an apparatus or a projector. That understanding comports with the plain and ordinary meaning of “and/or.”

### III. U.S. Patent No. 9,258,232 (Case No. 6:20-cv-00495)

#### A. “instructions for receiving, by a controller of the traffic flow control system, a backpressure signal, wherein the back pressure signal indicates a period of congestion” (claim 14)

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	<p>Governed by 35 U.S.C. § 112(f)</p> <p><b>Function:</b> receiving, by a controller of the traffic flow control system, a back pressure signal, wherein the back pressure signal indicates a period of congestion</p> <p>Indefinite under 35 U.S.C. § 112(b);</p> <p><b>Structure:</b> none disclosed.</p>

ZTE argues that this term is subject to §112(f) because the term “instructions” is a “nonce word that recites no structure ***by itself***.” Supp. Resp. at 4.

***First***, ZTE errs by focusing merely on the word “instructions” in isolation “***by itself***.” *See id.* In examining an analogous claim term, the Eastern District of Texas found that the term

“instructions to” was not indefinite. *Cypress Lake Software, Inc. v. Samsung Elecs. Am., Inc.*, 382 F. Supp. 3d 586, 643 (E.D. Tex. 2019), *reconsideration denied*, 6:18-CV-30-JDK, 2019 WL 4935280 (E.D. Tex. Aug. 23, 2019). In particular, the *Cypress* court reasoned that “whether recitation of ‘instruction’ performing a function is governed by § 112, ¶ 6 depends on whether the stated objectives and operation of the code connote sufficiently definite structure.” *Id.* (citing *Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1319-21 (Fed. Cir. 2004) (finding that “circuit [for performing a function]” was sufficiently definite structure because the claim recited the “objectives and operations” of the circuit)). In focusing on these “objectives and operations,” the *Cypress* court highlighted the recitation in the claims of structure that “execute the recited instructions” (a processor in the *Cypress* case) and also noted that the “claims further describe the structural interactions among” various structural components. *Cypress*, 382 F. Supp. 3d at 643. Based on these objectives and operations, the *Cypress* court held that “a POSITA would understand that the claim language recites sufficient structure and that the term ‘instructions’ is not used as a generic term or black box recitations of structure or abstractions.” *Id.* (citing *Zeroclick, LLC v. Apple Inc.*, 891 F.3d 1003, 1007-09 (Fed. Cir. 2018) (“[A] person of ordinary skill in the art could reasonably discern from the claim language that the words ‘program,’...and ‘user interface code,’...are used not as generic terms or black box recitations of structure or abstractions, but rather as specific references to conventional graphical user interface programs or code, existing in prior art at the time of the inventions.”)). Notably, the *Cypress* court correctly looked at the claim language holistically. *Id.* (“the **claim language** recites sufficient structure”).<sup>3</sup>

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<sup>3</sup> ZTE also cites to *Cypress* suggesting that the district court found § 112(f) applicable to a different term (“code for”) merely based on that term itself. Supp. Resp. at 6 (citing *Cypress*, 382 F. Supp. 3d at 614) (ZTE describing in the parenthetical “finding that recitations of ‘code for’ is governed by 35 U.S.C. § 112(f)”). But contrary to ZTE’s simplistic description of the holding, the *Cypress* court’s holding did not depend on that phrase “code for” itself. *Cypress*, 382 F. Supp. 3d at 615. Rather, the *Cypress* court applied the very same “objectives and operations” analysis as it did with “instructions to.” *Id.* Under that analysis, the court found that the “surrounding claim language [of the claims with ‘code for’] does not identify any specific structure of ‘code’ to perform the recited function.” *Id.* This is not the case here as described above. Moreover, specification in *Cypress*

Here, similar to the processor that executed instructions in *Cypress*, claim 14 recites a “traffic flow control system” that executes the instructions. ’232 patent at claim 14 (7:35-36) (“instructions for execution by a traffic flow control system”). The “traffic flow control system 10” is depicted in the specification as structure. *Id.* at 3:7-29; FIG. 1. Also, just as in *Cypress*, claim 14 recites other structural components including a “link,” “non-transitory machine-readable storage medium,” and a “controller.” *Id.* at 7:37-42. These structural components are also described and depicted as structural. ’232 patent at 3:7-29; FIG. 1. Thus, the correct approach is to look at these “objectives and operations” of the claim as a whole, and not, as ZTE proposes, to focus solely on whether “instructions” connotes sufficient structure “by itself.” *See* Resp. at 19.

The *Cypress* court’s analysis comports with this Court’s precedent. Br. at 19 (citing *Crossroads Sys., (Texas), Inc. v. Chaparral Network Storage, Inc.*, No. A 00 CA 217 SS, 2000 WL 35731852, at \*4 4 (W.D. Tex. July 27, 2000)). In particular, this Court in *Crossroads* opined:

From a review of the ***claim language as a whole***, the Court agrees with the plaintiff that the term “supervisor unit” is not purely functional, but refers instead to a device that can perform the tasks specifically listed in the claim language of the ’972 patent. Specifically, claims 1, 2 and 10 of the ’972 patent describe a “supervisor unit” that can: (1) maintain and map the configuration of networked Fibre Channel and SCSI storage devices; (2) include in this configuration an allocation of specific storage space to specific Fibre Channel devices; (3) implement access controls for the SCSI storage devices; and (4) process data in the storage router’s buffer to allow an exchange between the Fibre Channel and SCSI storage devices.

*Crossroads*, No. A 00 CA 217 SS, 2000 WL 35731852, at \*4.

**Second**, ZTE attempts to distinguish prior precedent finding that the recitation of “code” or “program” to not invoke § 112(f). ZTE attempts to do so by distinguishing the term at issue here (“instructions”) from “code” or “program.” Supp. Resp. at 5. ZTE, however, provides no evidence for its purported distinction and instead resorts to attorney argument. *See id.* ZTE’s attempt to distinguish between “instructions” and “code/program” also reveals the flaw in its

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expressly equated “code for” and “means for” by using the same functional language as in the claims except that the specification recites “means for” performing those functions, whereas the claims recite “code for” doing so. *Id.* Here, the specification lacks any reference to “means.” Thus, the *Cypress* court’s analysis of “code for” is inapposite, while its analysis of “instructions to” is on point for the reasons noted above.

myopic, “by itself” approach of focusing only on the word “instructions” in isolation without an understanding of the “objectives and operations” of the claim as a whole. *See Cypress*, 382 F. Supp. 3d at 643. Accordingly, even if ZTE had proved that a POSITA would appreciate a meaningful difference between “instructions” (on the one hand) and “code” or “program” (on the other hand), that difference does not in and of itself resolve whether § 112 (f) applies to the facts here.

**Third**, ZTE failed to address that claim 14 is recited as a *Beauregard* claim, which has long been recognized as a patentable form of claiming a computer program, where the claim is directed to an article of manufacture—*e.g.*, a computer-readable medium on which are encoded, typically, instructions for carrying out a process. *In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995). ZTE fails to address this Court’s holding that “computer readable medium” was an article of manufacture and not a means-plus-function limitation. *See Collaborative Agreements, LLC v. Adobe Systems Inc.*, Case No. A-14-CV-356-LY, 2015 WL 2250391, \*12–\*14 (W.D. Tex. 2015), *denying reconsideration after transfer*, Case No. 15-cv-03853-EMC, 2015 WL 7753293, \*4–\*8 (N.D. Cal. Dec. 2, 2015)). As this Court noted, “systems claims [which] are essentially a method carried out on an apparatus by a computer-implemented software code contained on a storage device[,] as in the code-segment claims[,] [employ] a standard claiming technique that has been repeatedly upheld as definite.” *Collaborative Agreements*, Case No. A-14-CV-356-LY, 2015 WL 2250391, at \*12–\*14 (collecting cases). ZTE has remained silent and utterly failed to address this point.

**Fourth**, in parallel proceedings, ZTE has petitioned for IPR review on anticipation grounds. **Ex. C** (Petition for Inter Partes Review) at 8. ZTE concedes the weakness of its indefiniteness positions before this Court by applying plain and ordinary meaning before the PTAB for the terms listed in II.B.-II.E. below. *Id.* at 7. A fundamental tenet of patent law holds that “[a] claim cannot be both indefinite and anticipated.” *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1332 (Fed. Cir. 2010). And in filing its IPR petition, “the petition must specify where each element of the claim is found in the prior art patents or printed publications relied upon” 37 C.F.R.

§ 42.104(b)(4) (emphasis added). Thus, by filing an IPR Petition asserting anticipation grounds, ZTE effectively concedes that the disputed claim terms for the '071 patent are not indefinite.

Dated: April 30, 2021

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**CERTIFICATE OF SERVICE**

A true and correct copy of the foregoing instrument was served or delivered electronically via U.S. District Court [LIVE]- Document Filing System, to all counsel of record, on this the 30th day of April 2021.

/s/ Ryan Loveless  
Ryan S. Loveless